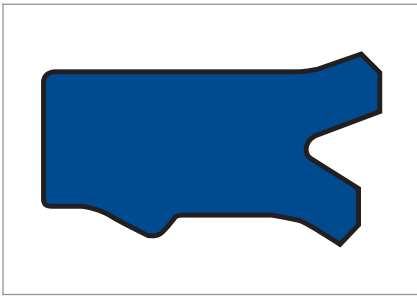


MERKEL U-RING T 24



PRODUCT DESCRIPTION

Merkel U-ring with asymmetrical profile, inner lip set back, additional support edge and sealing edge and press fit at the outside diameter.

PRODUCT ADVANTAGES

Single-acting rod seal especially for telescopic cylinders and radially restricted housings.

- Very good static and dynamic tightness
- Additional sealing edge prevents ingress of dirt to a large degree
- (Note: low dynamic deformation value, therefore not suitable for sealing systems)

APPLICATION

- Telescopic cylinders

MATERIAL

Material	Code	Hardness
Polyurethane	95 AU V142	95 Shore A

OPERATING CONDITIONS

Pressure p	40 MPa
Running speed v	0,5 m/s

Medium/ Temperature	95 AU V142
Hydraulic oils HL, HLP	-30 °C ... +110 °C
HFA fluids	+5 °C ... +50 °C
HFB fluids	+5 °C ... +50 °C
HFC fluids	-30 °C ... +40 °C
HFD fluids	-
Water	+5 °C ... +50 °C
HETG (rapeseed oil)	-30 °C ... +60 °C
HEES (synthetic ester)	-30 °C ... +80 °C
HEPG (glycol)	-30 °C ... +50 °C
Mineral greases	-30 °C ... +110 °C

DESIGN NOTES

Please observe our general design notes in → Technical Manual.

Surface quality

Peak-to-valley heights	R _a	R _{max}
Sliding surface	0,05 ... 0,3 µm	≤2,5 µm
Groove base	≤1,6 µm	≤6,3 µm
Groove flanks	≤3,0 µm	≤15,0 µm

Admissible gap dimension

The decisive factor for the function of the seal is the largest gap dimension occurring during operation on the non-pressurised side of the seal. → Technical Manual.

Profile dimension	16 MPa	26 MPa	32 MPa
4,0 mm	0,50 mm	0,40 mm	0,35 mm

Tolerances

The admissible gap width, tolerances, guide play and deflection of the guide under load are to be taken into account when designing D2. → Technical Manual.

Nominal Ø d	D	d
45 ... 171 mm	H8	f8

FITTING & INSTALLATION

Careful fitting is a prerequisite for the correct function of the seal. → Technical Manual.